## ENVIRONMENTAL

# Fact Sheet



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### **Recycling Aluminum Containers**

#### **Aluminum in Solid Waste**

Weight and Volume -- In 1995, approximately 2.0 million tons of aluminum packaging were discarded. This was about 1.0 percent of all municipal solid waste (MSW) generated in the U.S. Of this total, 82 percent were soft drink, beer, and food cans, and the remainder was foil and semi-rigid packaging. Over three-fourths of aluminum packaging in MSW comes from residential sources (the average American uses 364 aluminum cans and about 2.5 pounds of aluminum foil per year).

*Disposal* -- No demonstrable environmental concerns are associated with the disposal of aluminum packaging in landfills or incinerators. Aluminum is non-degradable and can be identified in landfill excavations after decades or centuries. Aluminum is also non-combustible and is found in the bottom ash of waste-to-energy incinerators, where it remains as an inert component after disposal.

#### **Aluminum Recycling**

Collection, Processing, and Storage -- Aluminum containers are one of the most commonly recycled materials in MSW. Over 96 percent of New Hampshire residents can recycle aluminum containers in curbside or dropoff programs. Nationwide, it is estimated that over 65 percent of all aluminum cans are recycled. In New Hampshire and elsewhere, aluminum containers are frequently collected in a mix with steel containers ("comingled cans") or in a mix with steel and plastic containers ("comingled containers"), from which they are later separated by magnets. Aluminum containers can be contaminated by dirt, moisture, glass, non-container aluminum, and other metals. These contaminants rarely interfere with recycling efforts, however. Aluminum containers are typically crushed and baled locally before they are shipped to markets for further processing.

Manufacturing -- Aluminum containers are completely recyclable. They can be processed back into new containers, requiring only about 5 percent of the energy needed to produce virgin aluminum from bauxite ore. The facilities required to produce recycled aluminum are also simpler and much less expensive than those required to produce aluminum from ore. Because the fundamental economics are so favorable, recycled aluminum is actively sought out by aluminum manufacturers. The "typical" aluminum can currently contains over 50 percent recycled content.

Markets for Recycled Aluminum -- Although they are subject to the impacts of worldwide fluctuations in commodity prices, aluminum markets in New Hampshire and nationwide are consistently strong. Year-in and year-out, aluminum cans are one of the most valuable

recyclables. In fact, although the total quantity of aluminum recycled at the local level is much less than many other commodities (e.g., newspaper, scrap metal), aluminum typically generates the most revenue for local recycling programs. New Hampshire does not have any manufacturers that consume recycled containers as an industrial input. New Hampshire's processors and brokers re-sell the aluminum containers they purchase locally in regional and national markets.

#### **For More Information**

Additional information on recycling aluminum containers and other materials in New Hampshire is available from:

Recycling Coordinator NH Department of Environmental Services, Waste Management Division 29 Hazen Drive, Concord, NH 03301 602-271-2900 TDD Access: Relay NH 1-800-735-2964